What is claimed is:

1. A synthetic layered silicate comprising the formula:

$$[Si_8(Mg_aLi_b)O_{20}(OH)_{4-y}F_y]^{z-} \; zM^+$$

wherein a = 4.75 to 5.45; b = 0.25 to 1.25; y = 0 to < 4; z = 12-2a-b; and M is Na^+ or Li^+; and

wherein the SiO_2/MgO is about 2.20 to about 2.40 and the lithium content is about 0.40% to about 0.80%; and,

wherein the synthetic layered silicate, when dispersed in an aqueous medium at about 2% by weight, wherein the aqueous medium contains from about 1 milliequivalent/gram synthetic layered silicate to about 12 milliequivalents/gram synthetic layered silicate of an electrolyte, increases the viscosity of the aqueous medium to greater than about 200,000 centipoise.

2. A method of making a synthetic layered silicate comprising:

preparing a magnesium metal compound solution, the magnesium metal compound solution comprising a magnesium cation;

preparing a carbonate compound solution, the carbonate compound solution comprising a carbonate anion;

mixing the magnesium metal compound solution and the carbonate compound solution;

adding a monovalent metal compound, and a silicate solution, to produce a synthetic layered silicate;

wherein the synthetic layered silicate, when dispersed in an aqueous medium at about 2% by weight, wherein the aqueous medium contains from about 1 milliequivalent/gram synthetic layered silicate to about 12 milliequivalents/gram synthetic layered silicate of an electrolyte, increases the viscosity of the aqueous medium to greater than about 200,000 centipoise.

3. The method of claim 2, wherein the carbonate compound comprises sodium carbonate.

4. The method of claim 2, wherein the monovalent metal compound comprises a lithium compound.

5. The method of claim 2, further comprising adding a monovalent halide compound.

6. The method of claim 5, wherein the monovalent halide compound comprises a fluoride compound.

7. The method of claim 2, wherein the silicate solution comprises sodium silicate.

8. The method of claim 2, wherein the silicate solution comprises silicic acid.

9. The method of claim 2, wherein the silicate solution comprises a mixture of silicon dioxide and sodium oxide.

10. The method of claim 2, wherein the silicate solution comprises sodium hexafluorosilicate.

11. The method of claim 2, wherein the carbonate solution is added to the divalent metal solution over a time period of greater than about 30 minutes.

12. The method of claim 2, wherein the reaction solutions are maintained at a temperature from about 40° C to about 80 ° C.

13. The method of claim 2, wherein the solutions are stirred during reaction below about 1000 rpm.

14. The method of claim 2, further comprising adding the monovalent metal compound to the reaction mixture at about 100% to about 300% above the value of the monovalent metal content required to provide the cation of the synthetic layered silicate.

15. The method of claim 2, further comprising subjecting the synthetic layered silicate to a hydrothermal treatment.

16. The method of claim 15, wherein the hydrothermal treatment comprises heating the synthetic layered silicate to a temperature greater than about 100° C.

17. The method of claim 15, wherein the hydrothermal treatment comprises heating the synthetic layered silicate for greater than about 1 hour.

18. A synthetic layered silicate prepared by the process comprising:

preparing a magnesium metal compound solution, the magnesium metal compound solution comprising a magnesium cation;

preparing a carbonate compound solution, the carbonate compound solution comprising a carbonate anion;

mixing the magnesium metal compound solution and the carbonate compound solution;

adding a monovalent metal compound, and a silicate solution, to produce a synthetic layered silicate;

wherein the synthetic layered silicate, when dispersed in an aqueous medium at about 2% by weight, wherein the aqueous medium contains from about 1 milliequivalent/gram synthetic layered silicate to about 12 milliequivalents/gram synthetic layered silicate of an electrolyte, increases the viscosity of the aqueous medium to greater than about 200,000 centipoise.

19. The synthetic layered silicate product of claim 18, wherein the carbonate compound comprises sodium carbonate.

20. The synthetic layered silicate product of claim 18, wherein the monovalent metal compound comprises a lithium compound.

21. The synthetic layered silicate product of claim 18, further comprising adding a monovalent halide compound.

22. The synthetic layered silicate product of claim 21, wherein the monovalent halide compound comprises a fluoride compound.

23. The synthetic layered silicate product of claim 18, wherein the silicate solution comprises sodium silicate.

24. The synthetic layered silicate product of claim 18, wherein the silicate solution comprises silicic acid.

25. The synthetic layered silicate product of claim 18, wherein the silicate solution comprises a mixture of silicon dioxide and sodium oxide.

26. The synthetic layered silicate product of claim 18, wherein the silicate solution comprises sodium hexafluorosilicate.

27. The synthetic layered silicate product of claim 18, wherein the carbonate solution is added to the divalent metal solution over a time period of greater than about 30 minutes.

28. The synthetic layered silicate product of claim 18, wherein the reaction solutions are maintained at a temperature from about 40° C to about 80 ° C.

29. The synthetic layered silicate product of claim 18, wherein the solutions are stirred during reaction below about 1000 rpm.

30. The synthetic layered silicate product of claim 18, further comprising adding the monovalent metal compound to the reaction mixture at about 100% to about 300% above the value of the monovalent metal content required to provide the cation of the synthetic layered silicate.

31. The synthetic layered silicate product of claim 18, further comprising subjecting the synthetic layered silicate to a hydrothermal treatment.

32. The synthetic layered silicate product of claim 31, wherein the hydrothermal treatment comprises heating the synthetic layered silicate to a temperature greater than about 100° C.

33. The synthetic layered silicate product of claim 31, wherein the hydrothermal treatment comprises heating the synthetic layered silicate for greater than about 1 hour.

34. A cleaner comprising:

water;

a synthetic layered silicate made by the process comprising:

preparing a magnesium metal compound solution, the magnesium metal compound solution comprising a magnesium cation;

preparing a carbonate compound solution, the carbonate compound solution comprising a carbonate anion;

mixing the magnesium metal compound solution and the carbonate compound solution;

adding a monovalent metal compound, and a silicate solution, to produce a synthetic layered silicate;

wherein the synthetic layered silicate, when dispersed in an aqueous medium at about 2% by weight, wherein the aqueous medium contains from about 1 milliequivalent/gram synthetic layered silicate to about 12 milliequivalents/gram synthetic layered silicate of an electrolyte, increases the viscosity of the aqueous medium to greater than about 200,000 centipoise; and,

a cleaner composition.

35. The synthetic layered silicate of claim 34, further comprising a monovalent halide compound.

36. The synthetic layered silicate of claim 35, wherein the monovalent halide compound comprises a fluoride compound.

37. The cleaner composition of claim 34 comprising:

a surfactant;

an acid;

stabilizing agents;

fragrances; and,

a dye.

38. The cleaner composition of claim 34 comprising:

a surfactant;

alkali hypochlorite;

fragrances; and,

a dye.

39. The cleaner composition of claim 34 comprising:

an alcohol;

an oil emulsifier; and,

aqueous ammonia.

40. An oven cleaner comprising:

water;

a synthetic layered silicate made by the process comprising:

preparing a magnesium metal compound solution, the magnesium metal compound solution comprising a magnesium cation;

preparing a carbonate compound solution, the carbonate compound solution comprising a carbonate anion;

mixing the magnesium metal compound solution and the carbonate compound solution;

adding a monovalent metal compound, and a silicate solution, to produce a synthetic layered silicate;

wherein the synthetic layered silicate, when dispersed in an aqueous medium at about 2% by weight, wherein the aqueous medium contains from about 1 milliequivalent/gram synthetic layered silicate to about 12 milliequivalents/gram synthetic layered silicate of an electrolyte, increases the viscosity of the aqueous medium to greater than about 200,000 centipoise;

an organic solvent;

an alkali metal hydroxide; and,

tetrapotassium pyrophosphate.

41. The synthetic layered silicate of claim 40, further comprising a monovalent halide compound.

42. The synthetic layered silicate of claim 41, wherein the monovalent halide compound comprises a fluoride compound.

43. A toothpaste comprising:

water;

sorbitol;

a synthetic layered silicate made by the process comprising:

preparing a magnesium metal compound solution, the magnesium metal compound solution comprising a magnesium cation;

preparing a carbonate compound solution, the carbonate compound solution comprising a carbonate anion;

mixing the magnesium metal compound solution and the carbonate compound solution;

adding a monovalent metal compound, and a silicate solution, to produce a synthetic layered silicate;

wherein the synthetic layered silicate, when dispersed in an aqueous medium at about 2% by weight, wherein the aqueous medium contains from about 1 milliequivalent/gram synthetic layered silicate to about 12 milliequivalents/gram synthetic layered silicate of an electrolyte, increases the viscosity of the aqueous medium to greater than about 200,000 centipoise;

silica; and,

an anti-caries compound.

44. The synthetic layered silicate of claim 43, further comprising a monovalent halide compound.

45. The synthetic layered silicate of claim 44, wherein the monovalent halide compound comprises a fluoride compound.

46. A drilling fluid comprising:

water;

a synthetic layered silicate made by the process comprising:

preparing a magnesium metal compound solution, the magnesium metal compound solution comprising a magnesium cation;

preparing a carbonate compound solution, the carbonate compound solution comprising a carbonate anion;

mixing the magnesium metal compound solution and the carbonate compound solution;

adding a monovalent metal compound, and a silicate solution, to produce a synthetic layered silicate;

wherein the synthetic layered silicate, when dispersed in an aqueous medium at about 2% by weight, wherein the aqueous medium contains from about 1 milliequivalent/gram synthetic layered silicate to about 12 milliequivalents/gram synthetic layered silicate of an electrolyte, increases the viscosity of the aqueous medium to greater than about 200,000 centipoise;

a weighting agent; and,

a fluid-loss agent.

47. The synthetic layered silicate of claim 46, further comprising a monovalent halide compound.

48. The synthetic layered silicate of claim 47, wherein the monovalent halide compound comprises a fluoride compound.

49. A paint comprising:

water;

propylene glycol;

titanium dioxide;

resin; and,

a synthetic layered silicate made by the process comprising:

preparing a magnesium metal compound solution, the magnesium metal compound solution comprising a magnesium cation;

preparing a carbonate compound solution, the carbonate compound solution comprising a carbonate anion;

mixing the magnesium metal compound solution and the carbonate compound solution;

adding a monovalent metal compound, and a silicate solution, to produce a synthetic layered silicate;

wherein the synthetic layered silicate, when dispersed in an aqueous medium at about 2% by weight, wherein the aqueous medium contains from about 1 milliequivalent/gram synthetic layered silicate to about 12 milliequivalents/gram synthetic layered silicate of an electrolyte, increases the viscosity of the aqueous medium to greater than about 200,000 centipoise.

50. The synthetic layered silicate of claim 49, further comprising a monovalent halide compound.

51. The synthetic layered silicate of claim 50, wherein the monovalent halide compound comprises a fluoride compound.

52. A printing ink comprising:

water;

a resin binder;

a rosin salt resin;

an aqueous emulsion resin polymer;

a rewetting agent;

a pigment;

a soybean oil; and,

a synthetic layered silicate made by the process comprising:

preparing a magnesium metal compound solution, the magnesium metal compound solution comprising a magnesium cation;

preparing a carbonate compound solution, the carbonate compound solution comprising a carbonate anion;

mixing the magnesium metal compound solution and the carbonate compound solution;

adding a monovalent metal compound, and a silicate solution, to produce a synthetic layered silicate;

wherein the synthetic layered silicate, when dispersed in an aqueous medium at about 2% by weight, wherein the aqueous medium contains from about 1 milliequivalent/gram synthetic layered silicate to about 12 milliequivalents/gram synthetic layered silicate of an electrolyte, increases the viscosity of the aqueous medium to greater than about 200,000 centipoise.

53. The synthetic layered silicate of claim 52, further comprising a monovalent halide compound.

54. The synthetic layered silicate of claim 53, wherein the monovalent halide compound comprises a fluoride compound.